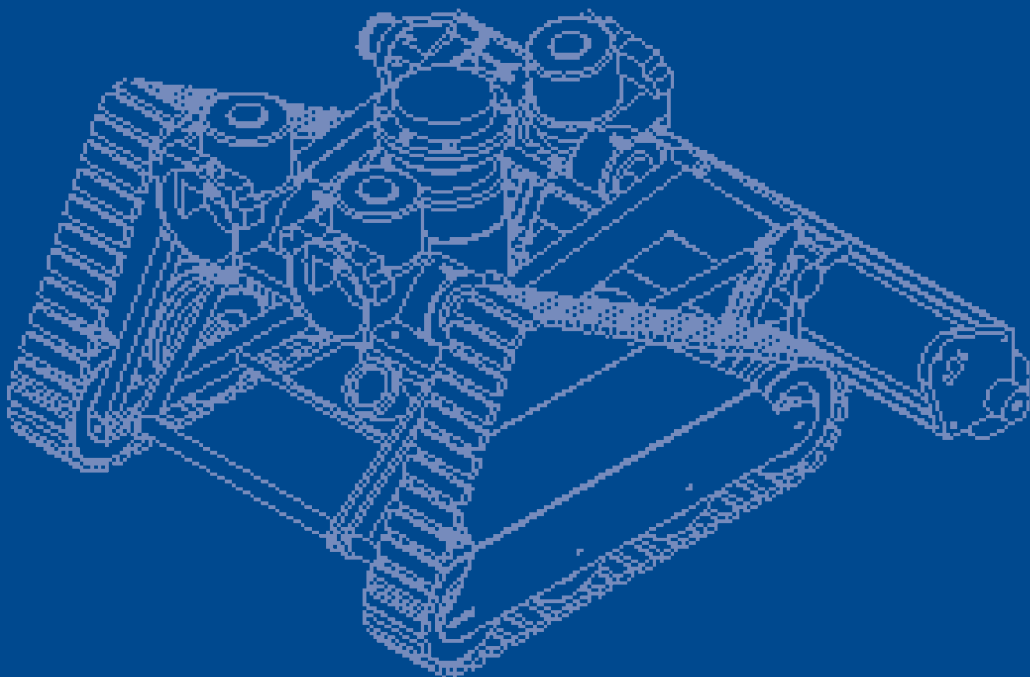




Underwater cleaning technology

Under
water
cleaning solutions
for the future



Good water quality relies on regular cleaning.

Regardless of whether we are dealing with basins in water works, wastewater treatment plants or commercial swimming pools, the bottoms and occasionally the sides must be cleaned regularly. The ability to clean without emptying the water is a challenge we at Weda are accustomed to and have successfully resolved for several years. In collaboration with our customers, we constantly develop our products and services to fulfill their requirements for pump capacity, speed, handling and cleaning needs. If you have specific requirements and needs that our standard products cannot handle we can help you by providing customized solutions.

Industrial enterprise since 1919

Weda has a long, diverse history. When the company was first founded it was a light metals foundry, which soon became one of Sweden's largest. The founder and president, W. Dan Bergman lent his initials to the company name. These days Weda manufactures various types of underwater cleaning equipment. Read more about our rich history below.



1919 W. Dan Bergman started an aluminum foundry in the town of Södertälje, Sweden that primarily manufactured household items.

1939 The flourishing foundry expanded its production and now manufactures military goods and airplane parts. The single largest customer is Bofors.

1943 Weda was acquired in 1940 by Bofors and its largest customer is now a Swedish pump manufacturer – Flygt AB.

1957 Flygt starts its own foundry. In response, Weda introduces its own submersible pump, which quickly becomes known as the Weda pump.

1969 Weda now employs 700 people, making the company Södertälje's largest employer.

1975 Weda launches its first pool cleaning product. A brush and a long rod for steering are attached to a Weda pump. Weda's first pool cleaner sees the light of day, the manual B250.

1981 The first automatic pool cleaner is introduced. The model is called the B600.

1986 Weda expands its product range with the B400, which is smaller than the B600 and adapted for 25-meter pools.

1992 Weda discontinues pump production. The Weda pump is however still manufactured and sold today under the name Wedapump.

1994 Weda is commissioned to design a machine that can clean sedimentation basins by Stockholm's water works (Stockholm Vatten). The design and development of the SD System begins.

1996 Weda Poolcleaner AB is certified according to ISO-9001. The first installation of a SD sludge collector is completed at Lovö water works just outside Stockholm, Sweden.

1997 Weda is acquired by the Eletta Group. Weda Water Service AB starts providing cleaning services in Sweden.

2000 YT-800 trials begin. Focus is again on underwater cleaning but now the target is to clean the sand filter without going offline.

2002 The B680 is launched at the Interbad trade show.

2003 The first slow-filter cleaning assignment was completed using the YT-800. Weda pool cleaner is certified according to ISO 9001:2000.

2004 Weda now has 25 distributors around the world and VR-600 operators on four continents. Weda delivered pool cleaners to the 2004 Olympics held in Athens, Greece.

Our business concept: Underwater cleaning technology

Weda is an industrial enterprise that offers solutions for cleaning underwater surfaces. Water works, wastewater treatment plants, industry and commercial swimming pools rank among our customers. Our business is divided into three companies. **Weda Poolcleaner AB** designs, builds and sells pool cleaners for swimming pools and commercial swimming facilities with high demands on performance and reliability. **Weda Vatten AB** designs and develops underwater cleaning equipment for water works and wastewater treatment plants. **Weda Water Service AB** develops and markets Weda's VR-600 system for cleaning water tower and reservoirs.

At the start of the 1970s Weda began marketing the so-called Submatic, a Switzerland-manufactured machine used to clean the bottoms of swimming pools. However, the quality was not up to standard and Weda began manufacturing its own pool cleaner. The business has since progressed from manual pool cleaners for swimming pools via automatic pool cleaners to considerably heavier equipment for industrial use, including sedimentation basins and sand filters. In other words, Weda's equipment is today used both in industry and to maintain high-quality swimming and drinking water.

Several companies can presently provide various types of surface cleaning solutions but none have Weda's expertise or experience in handling larger projects. Weda has carried out assignments and installed equipment around the world, from Australia to the USA. Weda was for example selected to clean the swimming pools prior to the swimming events during the 2004 Olympics in Athens.

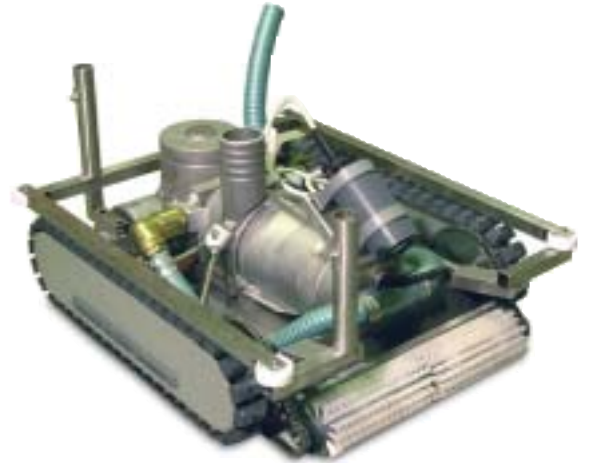


VR-600 Robotic reservoir cleaning system.

The VR-600 is remote controlled and equipped with rotating brushes and a powerful pump for removing the sediment.

Products for wastewater treatment plants, industry and **water works**

We offer several different surface-cleaning solutions customized to slow filters, sedimentation basins, water towers and other types of basins and reservoirs. Our products are developed in close collaboration with our customers.



VR-600 / CS-600

For cleaning water reservoirs and water towers

VR-600

Traditional cleaning processes meant that water towers and drinking-water reservoirs had to be emptied and manually cleaned or divers sent down. In both options, the reservoir has to be taken offline, which can lead to major disruptions in the main supply system.

Emptying a reservoir is time consuming and cleaning is labor intensive. Sending divers down in drinking water also entails a risk for contaminating the water.

When we developed the VR-600 our ambition was to design a vehicle that could clean effectively without having to shut down the reservoir and without sending personnel down into the reservoir.

The VR-600 is remote controlled and equipped with rotating brushes and a powerful pump that directly pumps out all loosened sediment – without raising turbidity in the reservoir.

The VR-600 is equipped with a video camera that facilitates inspection of the inside of the reservoir. The entire cleaning process is documented and the customer receives both a videotape and a written report.

Dimensions (L x W x H):

735 x 595 x 400 mm,

Pump capacity: 70 m³/h.

Speed: Variable from 0.5 to 10 m/min depending on sediment depth.

Power consumption: 2.3 kW

Other: Pan and tilt high-resolution video camera. Remote operation with variable brush speeds.

CS-600

The CS-600 is a smaller, simpler vehicle than the VR-600. It is designed for cleaning various types of catch ponds in wastewater treatment plants and industry. Due to its resilient, anti-corrosion coated surface the vehicle can be operated in corrosive environments. The vehicle is delivered with a practical transport trolley making the CS-600 a very mobile system.

The CS-600 is equipped with a fixed video camera that helps the operator maneuver the vehicle.

Dimensions (L x W x H):

740 x 630 x 360 mm,

Pump capacity: 70 m³/h.

Speed: 12 m/min.

Power consumption: 2.3 kW

Other: Fixed video camera.

YT-800



For cleaning sand filters and large basins

The YT-800 is an electricity-operated remote controlled submersible robot for cleaning large underwater surfaces, such as the bottom of a sand filter. The powerful pump and wide nozzle make it possible to clean large areas in a relatively short time. The sediment is pumped through a hose to a designated point of discharge, such as a sand treatment station.

Traditional cleaning using loading machines, conveyor belts and such require costly investments and manual filter cleaning is very labor intensive. Both methods require that the filter is drained and taken offline. With the YT-800, cleaning can be carried out during full operation.

Easily operated by one person, the YT-800 is remote controlled using a radio hand box. The vehicle can be equipped with underwater cameras to facilitate long-distance operation from a van or operations room for example. Using the YT-800 reduces cleaning costs and does not interrupt distribution. YT-800 has only electrical engines and uses no dangerous oils or chemicals that can damage the filter.

Other applications for the YT-800 include cleaning infiltration dams and surface cleaning large outdoor basins.

Dimensions (L x W x H):

1150 x 1200 x 900 mm.

Pump capacity: 100 m³/h.

Speed: Variable from 0.5 to 10 m/min.

Power consumption: 5.5 kW

Other: Rotating screw nozzle is vertically adjustable. Can be fitted with a video camera.

The SD System

Fixed installation in sedimentation basins

The bottoms of the sedimentation basins must be cleaned regularly to maintain good water quality. The SD System can effectively and cost-efficiently remove sediment without taking the basin offline.

The SD System removes sediments from the bottom of basins using submersible pumps mounted on the vehicle. This guarantees efficient cleaning without stirring up sediment. The system is a fixed installation, customized for each basin's width and particular suction needs. It is easy to install and requires no major adjustments to the basin.

Dimensions: Customized to the basin's dimensions.

Pump capacity: Customized to sediment quantities and types.

Speed: Variable up to 3 m/min.

Power consumption: Depends on the type of pump.

Other: Fully automated system with several pre-programmed parameters to optimise the system for each basin's specific conditions.





Product review

	VR-600	CS-600	YT-800	The SD System
Areas of use	Cleaning water towers and water reservoirs for drinking water.	Catch ponds for rain-water and all types of basins in wastewater treatment plants and industry.	Slow filter sludge lagoons, raw water basins and infiltration dams.	Various types of sedimentation basins.
Basin size	Up to 160 meter.	Up to 80 meter.	Up to 200 meter.	Customized to requirements.
Other information	Variable speeds with remote operation of the rotating brush.	Mobile cleaning robot. Anti-corrosion coated surface for industrial use. One speed.	Rotating screw nozzle for deep sediment, algae and seaweed.	Fully automated system.

Examples of installations and assignments

VR-600

Our most popular machine is the VR-600, used to clean water towers and reservoirs around the world - Sydney and Hong Kong for instance. These two cities suffer from constant water shortage and are therefore very restrictive with their resources. By using the VR-600 to clean water towers and reservoirs, costly disruptions are avoided and wasted water is kept at a minimum.

CS-600

CS-600 is used at several wastewater treatment plants around the world. In Australia for instance, the CS-600 is used in a polishing pond, the final basin before the water is reintroduced to nature.

YT-800

YT-800 is the latest addition to the product family but has already been successfully used in several slow-filter water works located in Sweden. In Aragon, Spain the YT-800 was used to clean huge catch ponds for rainwater.

The common feature in all our cleaning assignments is that filters and basins do not need to be taken offline. Moreover, the slow filter can sustain the bacterial cultures essential for efficient filtering.

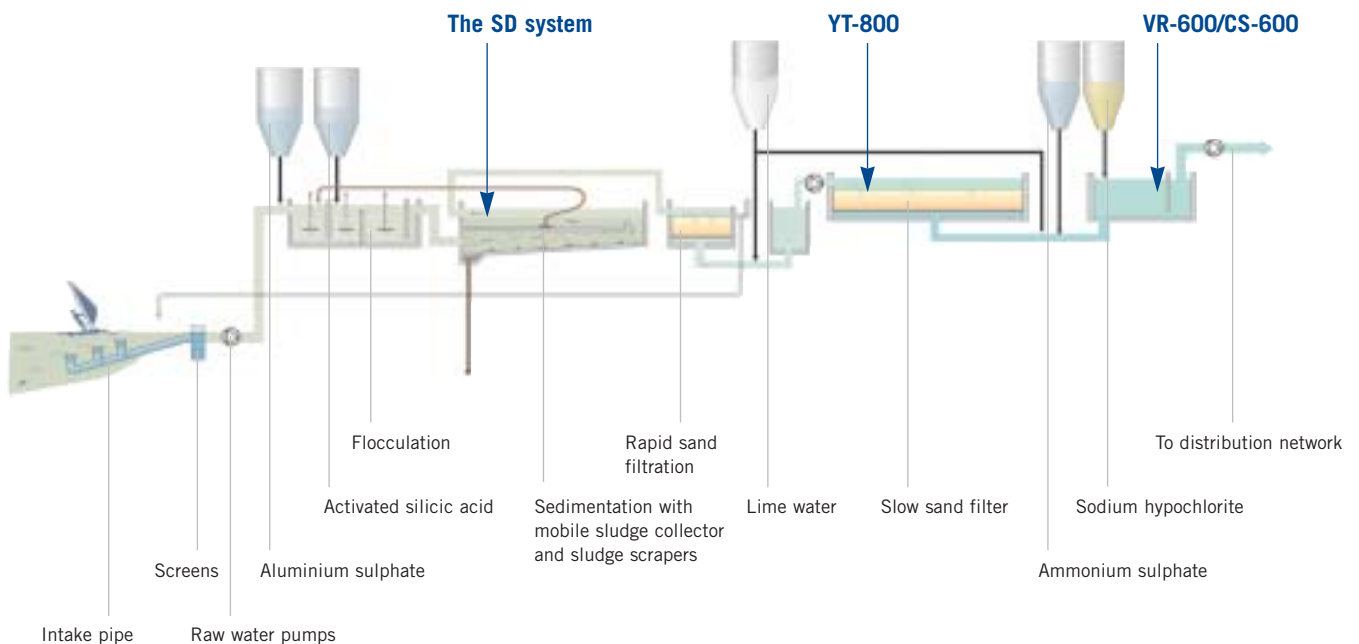
The SD System

In 1996 we installed six SD Systems in Lovö Vattenverk, the water works near Drottningholm Palace. The water works has a capacity of 275,000 m³/day and supplies the Stockholm region with drinking water.

The SD System was assembled on the basin bottom and is operated via microprocessors for cleaning at pre-set intervals. Programming is easily carried out via a control panel and, should the need arise the system can be run manually.

The SD System has been successfully assembled in several other water works around the world, including the Ohio American Water Plant in Tiffin, Ohio in the USA

Weda in a water works



Products for commercial swimming facilities and pools

After 30 years as the market's leading supplier of automatic pool cleaners for swimming pools, WEDA has become synonymous with quality, reliability and effective cleaning.



B450

Weda B450 is ideal for smaller indoor pools up to 25 meters in length. The machine has fixed brushes.

Pool length: 25 m
Pump capacity: 650 l/min.
Speed: 0.3 m/sek.



B480

Weda B480 is ideal for smaller pools ranging from 25 to 35 meters in length. The machine has rotating brushes.

Pool length: 25-35 m
Pump capacity: 650 l/min.
Speed: 0.3 m/sek.



B600

With a cleaning width of 600 mm and a powerful suction pump, the B600 cleans a 50-meter pool in just three hours. Can be equipped with a discharge hose for direct connection to the pool's filter system

Pool length: 50 m and outdoor pools.
Pump capacity: 1200 l/min.
Speed: 0.25 and 0.45 m/s.
Other: Can also clean pool walls.



B680

WEDA's latest model, the B680, is designed for the really big pools. The powerful pump sucks up everything in its way making it ideal for dirty pools like outdoor pools. A newly designed ergonomic handle makes it easy to lift the machine out of the pool. The new filter system is easy to remove and clean. Can be equipped with a discharge hose for direct connection to the pool's filter system

Pool length: 50 m and outdoor pools.
Pump capacity: 1200 l/min.
Speed: 0.25 and 0.45 m/s.
Other: Can also clean pool walls.



Weda at several of the best commercial swimming pools

Maintaining good water quality requires both effective water cleaning processes and effective underwater surface cleaning.

Furthermore, effective bottom cleaning means the amount of chlorine added to the water can be reduced. This contributes to a better

environment for both employees and visitors. One of the many advantages includes a lower risk of allergic reactions.

2004 Olympics in Athens – An official assignment

During the Olympic Games, no detail is too small to be left to chance. The principal concern is the athletes' well-being and the chance for them to do their best. Water quality is a significant factor to those whose arena is a swimming pool.

Weda was chosen in tough competition with other suppliers to handle the pool cleaning during the Olympic Games in Athens. Weda was the only company that could fulfill the strict requirements for quality, reliability and service due to its outstanding

products and the expertise of our local representative. We are naturally extremely proud of this official assignment and hope to have more opportunities to demonstrate our capacities and quality.



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